Pengaruh cara penyulingan terhadap sifat minyak pohon wangi
(Effect of system distillation leaf tree aromatic on properties)

Oleh/By :
Zulnely

Abstrak

Pohon wangi (Melaleuca bracteata F. Muell.) termasuk famili Myrtaceae banyak tumbuh di negara bagian Quensland (Australia), merupakan salah satu pohon penghasil minyak atsiri. Di Indonesia jenis ini dikenal dengan nama "daun wangi" tetapi masyarakat belum banyak mengenal baik bentuk pohon maupun manfaatnya, sehingga potensi dan manfaatnya belum tergali secara optimal. Di Australia jenis ini terkenal dengan nama Black Ti-tree, River Ti-tree, atau Black Tea-tree. Minyak ini dapat digunakan sebagai campuran dalam industri wangi-wangian dan atraktan karena mengandung methyl eugenol lebih dari 70%, sehingga mempunyai bau yang lebih menyengat dibanding methyl eugenol yang dijual di pasar.Terkait dengan hal tersebut, tulisan ini menyajikan hasil pencermatan pendahuluan cara penyulingan daun pohon wangi serta sifat minyaknya. Penyulingan daun tersebut menggunakan dengan dua cara yaitu sistem rebus dan sistem kukus. Minyak atsiri hasil penyulingan dianalisa rendemen dan sifat fisiko kimianya. rendemen minyak berkisar 2,02-2,12%; bobot jenis 1,0271-1,0361; indeks bias 1,5196-1,5216; bilangan asam 0,57-0,92; bilangan ester 17,77-15,72 dan methyl eugenol merupakan komponen utama minyak. Perbedaan cara penyulingan (rebus dan kukus) tidak mempengaruhi rendemen dan sifat fisiko kimia minyak. Cara rebus menghasilkan minyak atsiri dengan kandungan methyl eugenol (78%) lebih tinggi daripada cara kukus (50%).
Kata kunci : pohon wangi, daun, cara penyulingan, minyak atsiri, rendemen dan sifat fisiko kimia, metil uegenol

Abstract

Pohon wangi or Fragrant trees (Melaleuca Bracteata F. Muell.) that belong family Myrtaceae grow prevalently in Quensland (Australia) and are one of essential-oil-producing species. In Indonesia, this species is recognized with the name "daun wangi" (fragrant-smelling leaves), unfortunately most of the community there are still not yet familiar with it, regarding tree shapes as well as benefits. Therefore, the potential and uses of this species have not been explored. Meanwhile, this tree species in Australia is famous with the name "black ti-tree, river ti-tree, or black tea-tree". The essential oil has extracted from the tree leaves can be used as a mixture ingredient in fragrant-perfumery industries and as attractant, because it contains methyl eugenol more than 70%, which brings about a pungent aroma more stinging than other essential oil in the markets. In relevant, this article dealt with antecedent (preliminary) experiment to look into proper distillation methods on de leaves of this fragrant tree species, and qualities of the resulting-essential oil (yield and physico-chemical properties). Two method were implemented, i.e. steaming and cohobation. It turned out that out those two methods did not affect significantly the oil yield and physico-chemical properties. The oil yield ranged about 2.02-2.12%, specific gravity 1.0271-1.0361, refractive index 1.5196-1.5216, acid number 0.57-0.92, ester number 15.72-17.77, and methyl eugenol as the main oil component. However, cohobation method brought out the oil with methyl eugenol content (78%) greater than that of steaming method (50%).

Keywords : fragrant tree, leaves, distillation method, essential oil, yield and physico-chemical properties, methyl eugenol